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Immature stages of *Faunis aerope* (Leech, 1890)

(Lepidoptera, Nymphalidae)

by
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Abstract: In this paper, immature stages of *Faunis aerope* (Leech, 1890) from Chongqing, China are reported. Its final instar larva and pupa are compared with those of *F. eumeus* (Drury, 1773) from Hainan Island.

Faunis aerope (Leech, 1890) (fig. 12) inhabits the montane rain forests of S. China, Vietnam and Laos. Geographical populations of *F. aerope* (Leech) from different localities usually exhibit great variations of ♂ genitalia, and four subspecies have already been recognised. They are *F. a. aerope* (Leech), *F. a. excelsa* (Fruhstorfer, 1901), *F. a. centrala* Monastyrskii, 2004 and *F. a. montana* Nakamura, Wakahara & Miyamoto, 2010 (Monastyrskii, 2004; Nakamura et al., 2010). More likely, some subspecies among them, and even other unnamed geographical populations deserve distinct species status. Therefore, the study of the immature stages of *F. aerope* (Leech), the so called *aerope*-complex, from different localities is urgently needed.

In this work, ova and first-instar larvae of *F. aerope* (Leech) were gathered on palms from Mt. Simianshan, Jiangjin County, Chongqing [former E. Sichuan]. For comparison with the corresponding immature stages of *F. aerope* (Leech), the final instar larva and pupa of *F. eumeus* (Drury, 1773) (fig. 11), a more southern congeneric species, obtained from Hainan Island, are also illustrated.

Immature stages of *Faunis aerope* (Leech, 1890)

Ovum (fig. 1): Pure white in colour, round in shape, surface smooth and polish.

Larva (figs. 2-6, 8): First-instar larva (figs. 2, 8a): Black head, bearing a pair of tiny processes. Body entirely creamy white after hatching, turning orange dorsally and reddish brown ventrally after feeding; its caudal end bearing a pair of short, blackish forks; whitish primary setae moderate in length. Grown larva (figs. 3-6, 8b-g): Densely covered with long white hairs. Head black, armed with a pair of dumpy, multi-furcated processes. Body cylindrical in shape, orange red above spiracles dorsally, blackish brown ventrally; the forks on the caudal end blackish. Prepupa: Body colour deep yellow dorsally with strong greenish tinge.

Diagnosis of the final instar larva (figs. 6, 8g): It can be easily distinguished from the final instar larva of *F. eumeus* (Drury) (fig. 7) by the following characters: 1. Body is entirely orange red dorsally, whereas in *F. eumeus* (Drury) its dorsal side above spiracles is predominantly orange with intersegmental membranes and transverse grooves on terga blackish. 2. Processes on the head are more strongly built.

Pupa (fig. 9): Plump banana-shaped, smooth in texture, emerald green in colour, armed with a pair of yellowish-tipped, horn-like processes on the head.

Diagnosis of the pupa: It can be distinguished from the pupa of *F. eumeus* (Drury) (fig. 10) by the following characters: 1. Body is somewhat elongated. 2. Processes on the head are slightly longer. 3. Cremaster is yellowish tinged, whereas in *F. eumeus* (Drury) it is sky blue.

Food Plant: The larvae of *F. aerope* (Leech) feed on leaves of palm, *Trachycarpus fortunei* (Hook.) H. Wendl., Palmae as well as *Smilax china* L., Liliaceae. According to literatures, the caterpillar also feeds on *Coelogyne* sp., Orchidaceae (Nakamura et al., 2010), *Cycas panzhihuaensis* Zhou & Yang, Cycadaceae (Yu et al., 2009), *Musa* spp., Musaceae and *Pandanus* spp., Pandanaceae (Chou, 1994).

Biological notes: The ova are laid in cluster on leaves of food plants. The young larvae are gregarious. In this work, a finally pupated caterpillar had seven instars. According to Yu et al. (2009), the caterpillars from Panzhihua, S. Sichuan have five instars.

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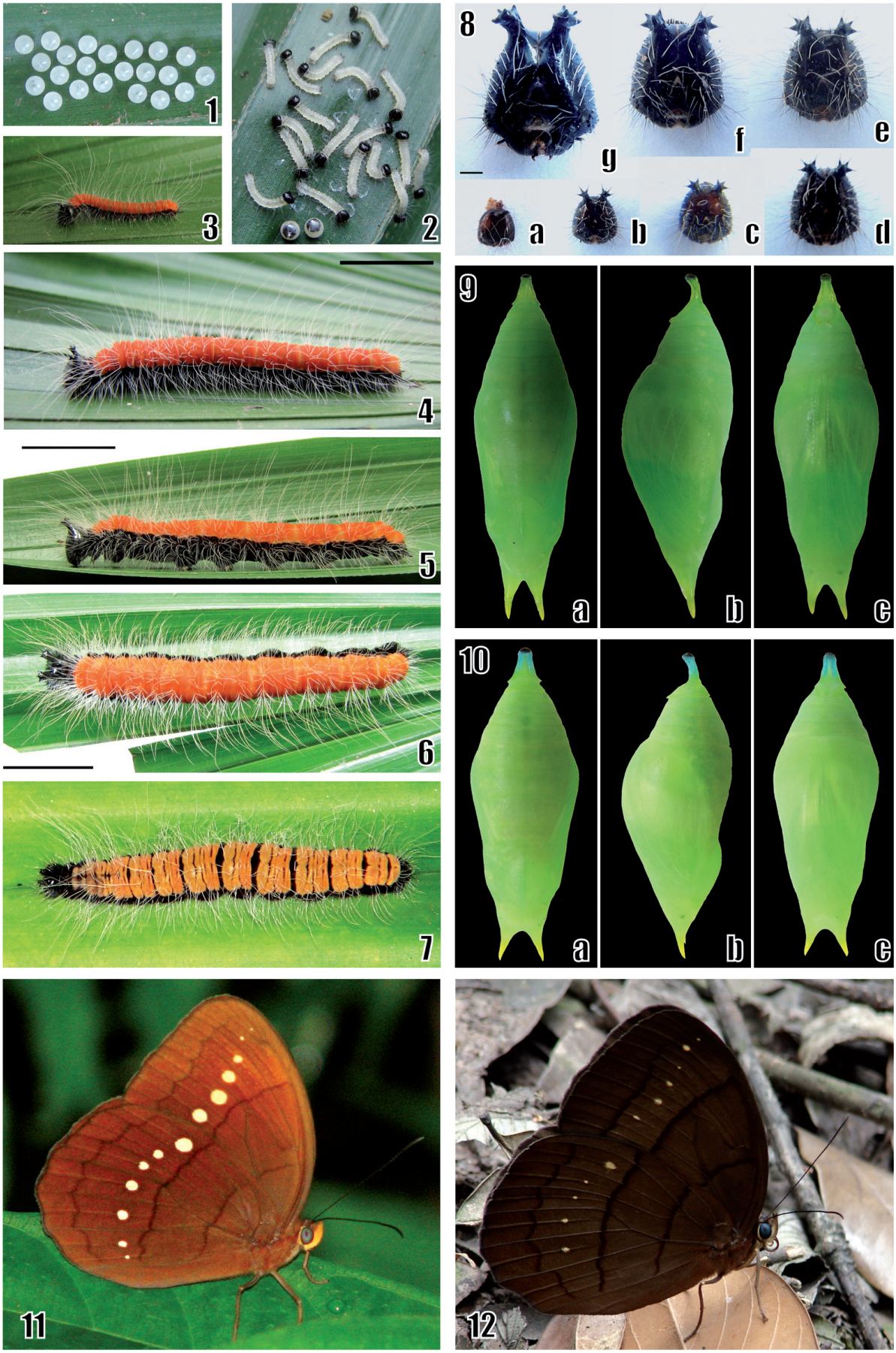

Fig. 1-6, 8, 9, 12: ***Faunis aerope*** (Leech, 1890), (1) A cluster of ova on the underside of a palm leaf (photographed by Ai-Ming Li); (2) L1 larvae and two hatching ova (photographed by Ai-Ming Li); (3) L2 larva, dorsolateral side; (4) L5 larva, dorsolateral side; (5) L6 larva, lateral side; (6) L7 larva, dorsal side; (8) L1-L7 head, front side; (9) pupa, dorsal, lateral, ventral; (12) imago, Mt. Simianshan, Jiangjin, Chongqing. **Fig. 7, 10, 11**: ***Faunis eumeus*** (Drury, 1773), (7) final instar larva, dorsal side. (10) Pupa, dorsal, lateral, ventral; (11) imago, Mt. Diaoluoshan, Lingshui, Hainan. Scale bar in fig. 4-6: 10 mm, in fig 8: 1 mm.